



# Research on Educational Conditions of Children with Learning Disabilities in Rural China

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**Abstract.** The advancement of education in China has dramatically improved the problem of inequity and imbalance of educational resources, and more attention has been paid to rural education in particular. However, special education still faces great difficulties. This study considers rural special education as a context; and bases on the features and reasons of children with learning difficulties, including gender differences, family conditions, psychological disorders, and school performances; and then proposes three practical approaches that can be used to make some changes in rural special education. It is recommended that society should build communities specific to children with learning difficulties, and allocate more medical care and educational resources to supplement rural special education with interactive technologies. In addition, governments, families, schools, and psychologists should cooperate in making joint efforts. This paper aims to appeal to society for more investment in the development of special education, and to genuinely promote social and educational equity through the development of intelligence assessment questionnaires appropriate to China's national conditions and culture, and the use of modern science and technology to achieve personalized education.

**Keywords:** Special education; Equity; Learning difficulties; Rural areas in China; Psychology.

## 1 Introduction

In the third decade of the 21st century, humanity has entered an era of unprecedented changes in the world, and world education has once again entered an era of great challenges. Over the past 40 years of reform and opening up, China's education, especially basic education, has undergone earth-shaking changes [1]. Through the implementation of a series of policies such as comprehensively eradicating illiteracy among young and middle-aged people and improving the overall cultural quality of the entire population, the gross enrollment rate for nine years of compulsory education has reached nearly 100 percent as of 2022, and all of the 2895 counties in China have achieved the basic balance of compulsory education at the county level [2-3]. The education urbanization rate has progressively and steadily increased from 2014 to 2021, reaching over 80% by

2021 [4]. As China's education urbanization rate is higher than the population urbanization rate, more rural children have opportunities to go to school [4]. In addition to the development of rural education itself, this is also due to the fact that a growing number of rural people bring their children to study in local cities when they migrate to the cities for work, thereby increasing the level of education penetration for the rural population.

Although rural education has been a significant leap in overall terms, educational inequality remains an unresolved issue, the majority of children receiving education are normal, and children with learning difficulties are usually still excluded and often left in rural areas. There are about 25 million children between the ages of 2 and 15 years who suffer from developmental and behavioral problems such as ADHD, Tourette's syndrome, learning difficulties, and developmental delays [5]. It is a very large group of children who usually need to receive special education. Generally, there are four main characteristics of children with learning difficulties [6-9]. The first is the gender difference. Research shows that the prevalence of learning difficulties is approximately 2:1 between boys and girls [6]. Secondly, the proportion of receiving special education in impoverished families is much lower than in other families, because poor families tend to give up the education of children with learning difficulties. Thirdly, children with psychological disorders such as ADHD, autism, dyslexia and depression are more likely to have learning disabilities [7]. Finally, children with learning disabilities are usually expelled from normal schools as they are unable to catch up with the normal learning speed of other children [8].

As far as special education is concerned, educational and medical resources in rural areas are more scarce than in big cities, especially for children with learning difficulties in rural areas, which directly exacerbates the difficulty of special education and hinders the development of equality in education [6]. Therefore, based on the existing literature and data analysis, this study focuses on the special background of rural areas, and explores practical improvement strategies by analyzing the causes, so as to bring some changes for children with learning difficulties in rural areas.

## **2 Approaches**

### **2.1 Community Building and Peer Support**

Social support is defined as the perception of support assumed to be available if needed, and has been found to be the best predictor of well-being. Social support in the general population may protect against loneliness in adolescence. Social support may come from different sources, such as parents, teachers, and peers, all of which can help children with learning difficulties adapt to their surrounding environment and improve their feelings of well-being [9]. Therefore, attention should be paid to building a community in which social support can be centralized.

Many psychologists investigated the effect of perceived social support from multiple sources on adjustment and found that, whereas boys compared to girls reported a lower degree of perceived social support from all sources except parents, support from classmates worked better in helping boys with learning difficulties. At the same time, the

centralization of children with learning difficulties can, to a certain extent, also form peer companionship. If they socialize with each other, they can further form peer support and reduce the risk of loneliness [10].

Building a community requires a certain amount of space and investment, so it is suggested that it be combined with rural party building to open up spaces for the building of communities by expanding local party service centers [11]. In addition, unused space is utilized to build local rural libraries or stay halls so that locals who are able to provide social support and social care can support children with learning difficulties to stay at their own convenience. The establishment of a centralized community allows for the consolidation of resources and compensates for the shortage of rural educational resources to a certain extent. In the long run, the combination of rural party building and community for rural children with learning difficulties can reflect the educational equity of disadvantaged groups in grassroots governance.

## 2.2 Interactive Technologies

The development of technology can compensate for the lack of medical resource in rural areas, as children can finish online medical assessments using interactive devices, such as computers and AI [12]. Every child with learning difficulties has his or her unique underlying reasons and a propiate zone for development. If these unique underlying reasons and appropriate zones are found, the efficiency of special education can be improved. Interactive devices can function well by precisely locating reasons and zones, which plays a fundamental role in designing personalized education plans for children with learning difficulties in rural areas.

**The Assessment of Students' Learning Disability.** Since the influence of the environment on a person is multilevel, including biological, behavioral, and cognitive levels, the causes that trigger the same behavioral manifestations are multiple and their corresponding solutions are different [4]. Therefore, the use of interactive devices in personalized diagnosis is crucial for the treatment of children with learning difficulties, as it can be used to assess the causes and extent of a student's learning difficulties and to provide the corresponding therapeutic solutions. Although the relevant equipment and software are more expensive, these interactive devices have the advantages of being reusable, accurate, and efficient. In the long run, they can reduce assessment costs and improve the accuracy and timeliness of the assessment of students' learning difficulties. And targeted measures or solution measures can be designed for each student's specific problems.

**Urban and Rural Students in Overall Qualities.** Urban and rural students are basically the same in terms of learning methods, receptivity, and participation in sports, but urban students are better than rural students in terms of manner, personal hygiene habits, social skills, and self-confidence [13]. Rural students are better than urban students in terms of their ability to lead an independent life, hard work, and diligence, and their

attitude toward encountering difficulties, as well as their honesty and integrity. Therefore, the roots caused of learning difficulties affecting urban and rural student are various. Special assessment system or questionnaires based on the unique context (such as rural dialects and customs) are needed.

**Public Services.** The incentive effect of China's fiscal decentralization system on local governments has led to an urban bias in the provision of basic public services, resulting in differences in access to opportunities for urban and rural residents for personal development and income enhancement, and therefore widening the income gap between urban and rural areas [14]. Therefore, more attention should be paid to applying interactive technologies in rural areas. In addition, since children in urban areas have a greater chance of being exposed to advanced technology, the novel technique has fewer irritants in urban children than in rural children, and it is more meaningful for rural children to use interactive devices.

**Zone of Proximal Development.** "Zone of proximal development," proposed by Vygotsky, can be the theoretical basis for designing personalized plans for children with learning difficulties [15]. This theory recognizes that there are two levels of student development: the current level (which refers to the level of problem solving that can be achieved through independent activities), and the level of possible development (which refers to the potential that can be gained through teaching and learning). Interactive devices can function well in assessing the "Zone of proximal development" and then operate education in the zone of proximal development of children with learning difficulties, so the teaching process will become more efficient.

### 2.3 Cooperation between Government, Families, Schools and Psychologists

The education of children with learning difficulties requires collaborative efforts and contributions from all parties, including the Government, families, schools and psychologists [16].

The solution to poverty among rural families still depends on economic development. Although China's economy has soared since its reform and opening up, there is still a long way to go because of its large population. In addition to the socioeconomic base, the ideology of rural families also needs to be changed. They should pay more attention to the education of children with learning difficulties, which requires the joint support and efforts of social forces to form a good social climate and ideology. The Government can provide subsidies to families with special needs and send commissioners to conduct ideological counseling and persuasion.

In addition, campus is still the main venue for students to learn. Many methods can be used to improve rural special education teachers' retention ratio. On the one hand, we should attach importance to the cultivation of a sense of local community among rural teachers working for special education, so that special education teachers will be willing to stay in the countryside and treat children with learning difficulties in an ac-

commodating manner. On the other hand, an honor system for special education teachers can be established and material and spiritual support can be provided to enhance their sense of achievement [17]. Simultaneously, educational psychologists should be involved in this special rural education system to provide guidance and assistance. Considering that it is inconvenient for professors to get to rural areas, they are encouraged to provide free online clinics [18].

### 3 Current Situation

There are some difficulties in the implementing of the proposed programs and strategies, such as the funding of community building and purchase of interactive equipment. but these difficulties are not completely insurmountable. This requires the government, social organizations, volunteers, and public welfare foundations to make concerted efforts to overcome the difficulties encountered in the process of implementation and to make use of modern science and technology to achieve the popularization of personalized education.

### 4 Conclusions

This paper is highly relevant in analyzing the educational problems of children with learning difficulties in a rural context and provides some practical approaches to making some changes. However, this study has some limitations. Due to these conditions, fieldwork research is insufficient, and a summary of the actual situation of rural special education is not comprehensive; therefore, further in-depth practical research is needed. At the same time, the research method is not very scientific or rigorous, and the collection and analysis of data and information are not comprehensive. At this stage, the author's professional knowledge was general and superficial. In future research, the author will conduct in-depth research to understand the sore points of China's rural special education reform in a full-scale way, and use more data analysis software such as Nvivo or SPSS to conduct a more accurate qualitative analysis of the data and information, anticipating the development of more comprehensive and practical proposals.

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